

ENCAPSIDATED RECOMBINANT POLIOVIRUS NUCLEIC ACID AND METHODS OF MAKING AND USING SAME

Abstract

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10 The present invention pertains to a method of encapsidating a recombinant poliovirus
nucleic acid to obtain a yield of encapsidated viruses which substantially comprises
encapsidated recombinant poliovirus nucleic acid. The method of encapsidating a
recombinant poliovirus nucleic acid includes contacting a host cell with a recombinant
15 poliovirus nucleic acid which lacks the nucleotide sequence encoding at least a portion of a
protein necessary for encapsidation and an expression vector comprising a nucleic acid which
encodes at least a portion of one protein necessary for encapsidation under conditions
appropriate for introduction of the recombinant poliovirus nucleic acid and the expression
vector into the host cell and obtaining a yield of encapsidated viruses which substantially
20 comprises an encapsidated recombinant poliovirus nucleic acid. A foreign nucleotide
sequence is generally substituted for the nucleotide sequence of the poliovirus nucleic acid
encoding at least a portion of a protein necessary for encapsidation. The invention further
pertains to encapsidated recombinant poliovirus nucleic acids produced by the method of this
invention and compositions containing the encapsidated or nonencapsidated recombinant
poliovirus nucleic acid containing a foreign nucleotide sequence for use in a method of
stimulating an immune response in a subject to the protein encoded by the foreign nucleotide
sequence.